

# CRUISE SUMMARY REPORT

FOR COLLATING CENTRE  
USE

Centre: Ref.  
no:  
Is data exchange  
restricted?   
  Yes  
In part No

SHIP enter the full name and international radio call sign of the ship from which the data were collected, and indicate the type of ship, for example, research ship; ship of opportunity, naval survey vessel; etc.

Name: TRIDENS

Call Sign: PBVO

Type of ship: FISHERIES RESEARCH VESSEL

CRUISE NO./NAME 2013 week 26-29 HERAS (North Sea Herring Acoustic Survey)

CRUISE PERIOD start 24 06 2013 to 19 07 2013  
(set sail) day month year day month year

PORT OF DEPARTURE (enter name and country) SCHEVENINGEN, THE NETHERLANDS

PORT OF RETURN (enter name and country) SCHEVENINGEN, THE NETHERLANDS

RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coordinating the scientific planning of the cruise.

Name: IMARES, Institute for Marine research and Ecosystem studies

Address: P.O. BOX 68  
1970 AB IJMUIDEN  
HARINGKADE 1

Country: THE NETHERLANDS

CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise.

Bram Couperus and Sascha Fässler, IMARES

OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter sufficient information about the purpose and nature of the cruise so as to provide the context in which the reported data were collected.

*To carry out a hydro acoustic survey defining the abundance of herring and sprat in the North Sea, in co-operation with the institutes of Norway, Scotland, Denmark, Ireland and Germany. Calibration of the echosounder in a sheltered area, preferably at Scapa Flow, Orkneys 58°56'71 N - 003°00'57 W, Loch Eriboll 58°30N - 4°41W (second choice), Stavanger fjord 59°05N - 005°36 (third choice) or Kristiansand harbour 58°08N - 007°59E (fourth choice).*

PROJECT (IF APPLICABLE) if the cruise is designated as part of a larger scale cooperative project (or expedition or programme), then enter the name of the project, and of the organisation responsible for coordinating the project.  
Project name: North Sea Herring Acoustic Survey (HERAS)

Coordinating body: IMARES, Institute for Marine research and Ecosystem studies

PRINCIPAL INVESTIGATORS: Enter the name and address of the Principal Investigators responsible for the data collected on the cruise, and who may be contacted for further information about the data (The letter assigned below against each Principal Investigator is used on pages 2 and 3, under the column heading 'PI', to identify the data sets for which he/she is responsible)

Bram Couperus and Sascha Fassler

MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS

PI	APPROXIMATE POSITION		DATA TYPE	DESCRIPTION
see top	LATITUDE		enter code(s) from list on cover page	identify, as appropriate, the nature of the instrumentation, the parameters (to be) measured, the number of instruments and their depths, whether deployed and/or recovered, dates of deployment and/or recovery, and any identifiers given to the site.
of page	deg min N/S	deg min E/W		

MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS

PI	APPROXIMATE POSITION		DESCRIPTION
			their depths, whether deployed and/or recovered, dates of deployment and/or recovery, and any identifiers given to site.
	Station-id	ICES-rectang latitude longitude	

SUMMARY OF MEASURED AND SAMPLES TAKEN

PI	NO	UNITS	DATA TYPE	DESCRIPTION
	2037	nautical miles	EK60 Raw	Hydro Acoustic Data
	47	downcasts 500m	CTD	Hydrographical data
	22	pelagic trawls stations	fish data	biological data (number, weight, length, maturity, age)

GENERAL OCEAN AREA(S): Enter the names of the oceans and/or seas in which data were collected during the cruise - please use commonly recognised names (see, for example, International Hydrographic Bureau Special Publication No. 23, 'Limits of Oceans and Seas')

NORTH SEA

**SPECIFIC AREAS:** If the cruise activities were concentrated in a specific area(s) of an ocean or sea, then enter a description of the area(s). Such descriptions may include references to local geographic areas, to sea floor features, or to geographic coordinates.

**GEOGRAPHIC COVERAGE - INSERT 'X' IN EACH SQUARE IN WHICH DATA WERE COLLECTED**

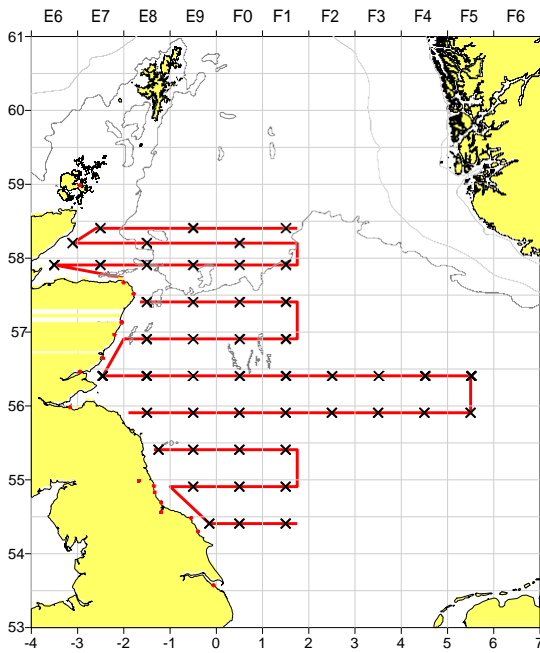


Figure 1b. Map of hydrographical stations (crosses) during the July 2013 North Sea herring acoustic survey on R/V Tridens.

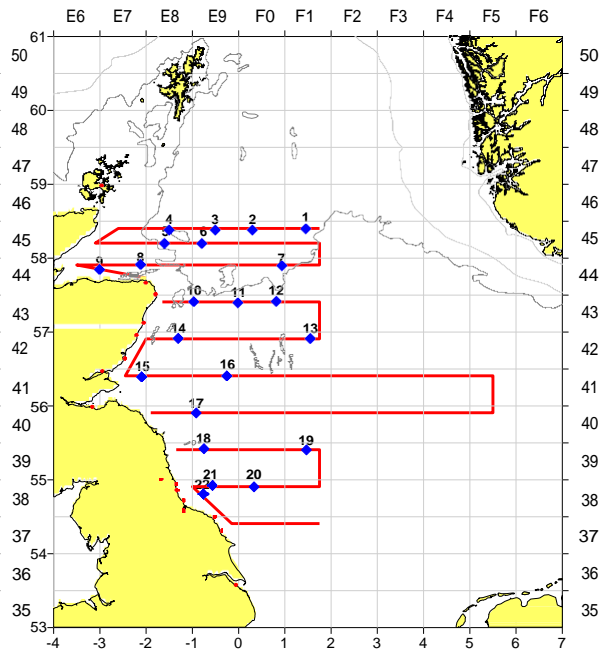


Figure 1a. Map of executed cruise track and positions of trawl stations (blue diamonds with numbers) during the July 2013 North Sea herring acoustic survey on R/V Tridens.